

## Injury among Residents of Gila County, Arizona 2005

Injury is a public health problem that impacts the lives of thousands of Arizona residents each year. Chronic pain, disability, large medical bills, changes in quality of life, and premature death are just some of the possible effects of injuries. These effects can extend beyond injured individuals to their families and communities. With non-fatal injuries, family members are often required to provide care, which can result in time away from work, loss of income, and increases in stress within the family. At the community level, the financial burden of injuries can include medical expenses, rehabilitation, lost wages, and lost productivity. Most injuries are predictable and preventable. Understanding the causes of injury is an important step toward reducing injury-related morbidity and mortality.

The following report identifies the leading causes of injury among residents of Gila County in 2005. This report is intended to be used as a guide for strategy development, program implementation, and evaluation. The Arizona Department of Health Services Injury Prevention Program operates under the vision of reducing injuries in Arizona using integrated surveillance and evidence-based interventions. This report was generated to increase awareness of county-specific injury issues and to facilitate opportunities for effective injury prevention activities.

**Figure 1. Injury Pyramid for Gila County Residents, Arizona 2005**

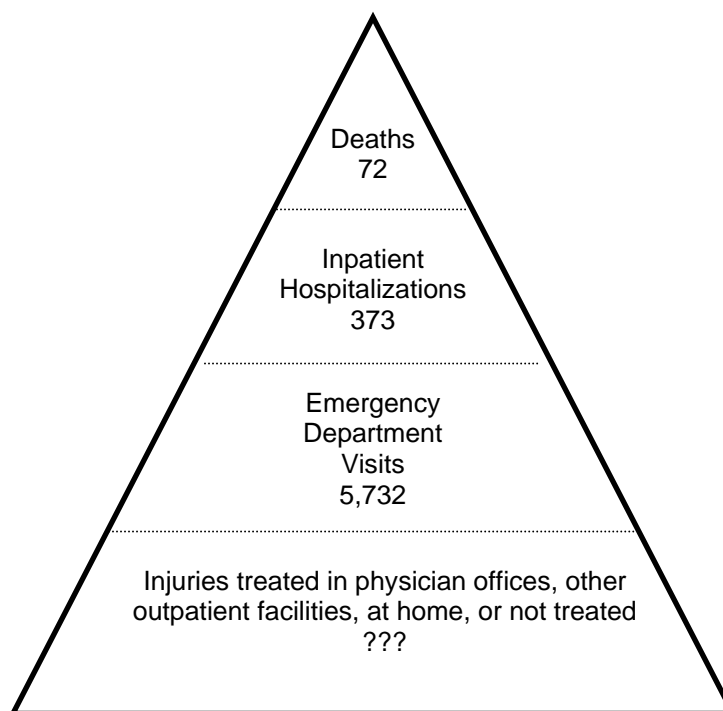


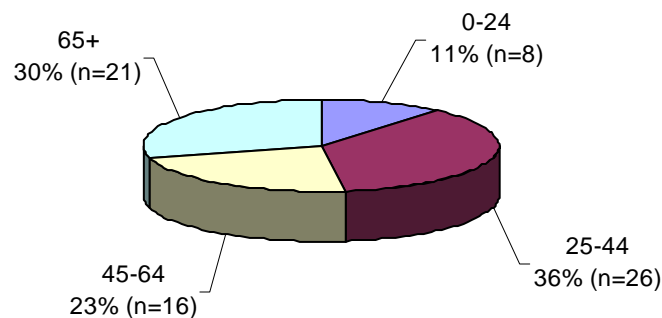
Figure 1 shows an injury pyramid for residents of Gila County during 2005. This pyramid shows that deaths represent the smallest proportion of injuries. The proportions increase towards the foundation of the pyramid, which is comprised of

hospital discharges, emergency department visits, and self care. Although injuries that do not require medical treatment may be the most numerous, no existing datasets capture these types of injuries.

## Deaths

In 2005, there were 72 injury-related deaths in Gila County. Most of these deaths were among males (68 percent, n=49), and females accounted for 32 percent (n=23). The largest percentage of deaths was among individuals ages 25 to 44 years (36 percent, n=26). Age distributions are shown in Figure 2.

**Figure 2. Injury-Related Deaths by Age Group, Gila County, Arizona 2005 (n=72)**



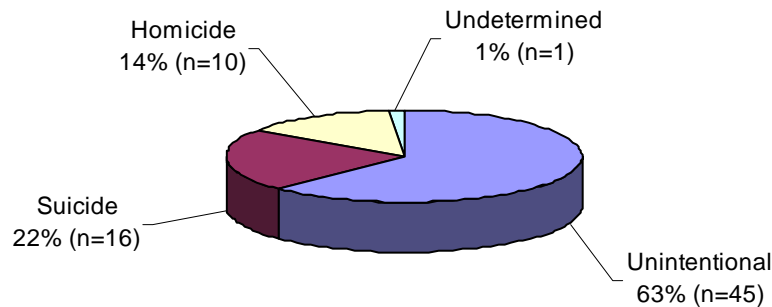
Does not include 1 female with missing age

Non-Hispanic Whites accounted for the majority of injury-related deaths in Gila County (65 percent, n=47), followed by American Indians (18 percent, n=13) and Hispanics (15 percent, n=11). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

For the state of Arizona, unintentional injury is the leading cause of death among all residents ages 1 to 44 years. However, for residents of Gila County, unintentional injury is the leading cause of death for individuals ages 15 to 44 years.<sup>1</sup> Sixty-three percent of injury-related deaths in Gila County were due to unintentional injuries (n=45); 22 percent were suicides (n=16); 14 percent were homicides (n=10); and 1 percent were of undetermined intent (n=1). Figure 3 shows injury-related deaths by intent.

<sup>1</sup> Arizona Health Status and Vital Statistics 2005.

**Figure 3. Injury-Related Deaths by Intent,  
Gila County, Arizona 2005 (n=72)**



#### *Gila County Injury-Related Deaths Compared to Other Arizona Counties*

Table 1 shows the intent of injury-related deaths for residents of Gila County compared to residents of the rest of Arizona. The leading intent of injury-related deaths was unintentional for both Gila County and the remaining counties, accounting for the majority of injury-related deaths. Overall, Gila County and the rest of Arizona had similar percentages of suicides and homicides.

<b>Table 1. Intent of Injury-Related Deaths, Gila County Compared to Other Arizona Counties, 2005</b>			
Gila County (n=72)		Arizona, excluding Gila County (n=4,518)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	63	Unintentional	65
Suicide	22	Suicide	20
Homicide	14	Homicide	11
Undetermined	1	Undetermined	4

#### *Suicide*

Nearly all of the suicides in Gila County were males (94 percent, n=15). Nineteen percent of suicides were among individuals ages 15 to 24 years (n=3); 25 percent were among individuals ages 25 to 44 years (n=4); 31 percent were among individuals ages 45 to 64 years (n=5); and 25 percent were among individuals 65 years and older (n=4). The most common cause of suicide was firearms (75 percent, n=12).

#### *Unintentional Injury*

The most common cause of unintentional injury-related deaths in Gila County was motor vehicle traffic crashes (44 percent, n=20). Eighteen percent of unintentional injury deaths had other/unspecified causes (n=8). The causes of unintentional injury-related deaths during 2005 in Gila County are shown in Table 2.

<b>Table 2. Causes of Unintentional Injury-Related Deaths among Gila County Residents, Arizona 2005</b>		
<b>Cause</b>	<b>Number</b>	<b>Percent</b>
Motor vehicle traffic	20	44%
Other/unspecified	8	18%
Fall	5	11%
Poisoning	5	11%
Other transport	4	9%
Other pedestrian	3	7%
<b>Total</b>	<b>45</b>	<b>100%</b>

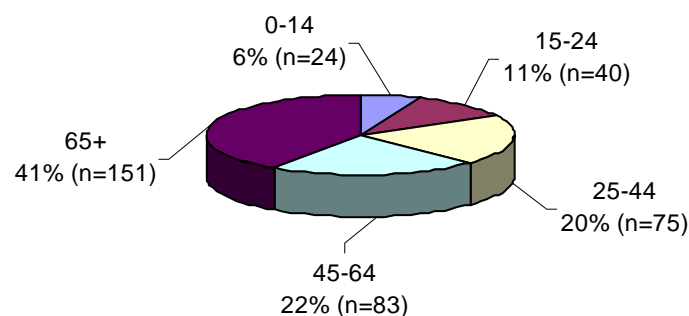
### Motor vehicle traffic crashes

Males accounted for 65 percent of unintentional motor vehicle traffic-related deaths (n=13) and females accounted for 35 percent (n=7). Fifteen percent of these deaths were among individuals ages 15 to 24 years (n=3); 55 percent were among individuals ages 25 to 64 years (n=11); and 25 percent were among individuals 65 years and older (n=5). One traffic-related death had missing age. For most of the motor vehicle traffic-related deaths, the location of the injured person was not specified on the death certificate (80 percent, n=16).

### **Non-Fatal Inpatient Hospitalizations**

In 2005, there were 373 non-fatal inpatient hospitalizations due to injury among residents of Gila County. Fifty percent were male (n=187) and 50 percent were female (n=186). Forty-one percent of the hospitalizations were among individuals 65 years and older (n=151). Figure 4 shows injury-related inpatient hospitalizations by age group among residents of Gila County.

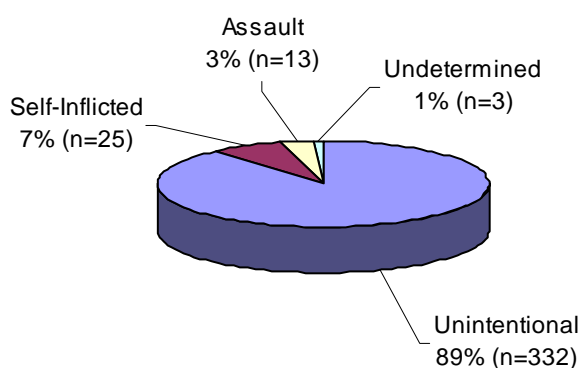
**Figure 4. Injury-Related Inpatient Hospitalizations by Age Group, Gila County, Arizona 2005 (n=373)**



There were 301 injury-related hospitalizations among White, Non-Hispanic residents of Gila County (81 percent). The second highest number was among American Indians (9 percent, n=33), followed by Hispanics (9 percent, n=32). Rates by racial/ethnic groups could not be calculated due to small sample sizes.

Eighty-nine percent of the inpatient hospitalizations were due to unintentional injuries (n=332); 7 percent were due to self-inflicted injuries (n=25); 3 percent were due to assaults (n=13); and 1 percent were of undetermined intent (n=3). Figure 5 shows injury-related hospitalizations by intent.

**Figure 5. Injury-Related Inpatient Hospitalizations by Intent, Gila County, Arizona 2005 (n=373)**



#### *Gila County Injury-Related Hospitalizations Compared to Other Arizona Counties*

Table 3 shows the intent of injury-related hospitalizations for residents of Gila County compared to residents of the rest of Arizona. The leading intent of injury-related hospitalizations was unintentional for both Gila County and the remaining counties, accounting for the majority of injury-related hospitalizations. Gila County had a smaller percentage of hospitalizations due to assaults (3 percent) than the remainder of Arizona (6 percent).

<b>Table 3. Intent of Injury-Related Inpatient Hospitalizations, Gila County Compared to Other Arizona Counties, 2005</b>			
Gila County (n=373)		Arizona, excluding Gila County (n=34,651)	
Intent	Percent of Total	Intent	Percent of Total
Unintentional	89	Unintentional	84
Self-Inflicted	7	Self-Inflicted	8
Assault	3	Assault	6
Undetermined	1	Undetermined	2

The most common cause of unintentional inpatient hospitalizations in Gila County was falls (50 percent, n=166). Table 4 shows the causes of unintentional injury-related hospitalizations among residents of Gila County.

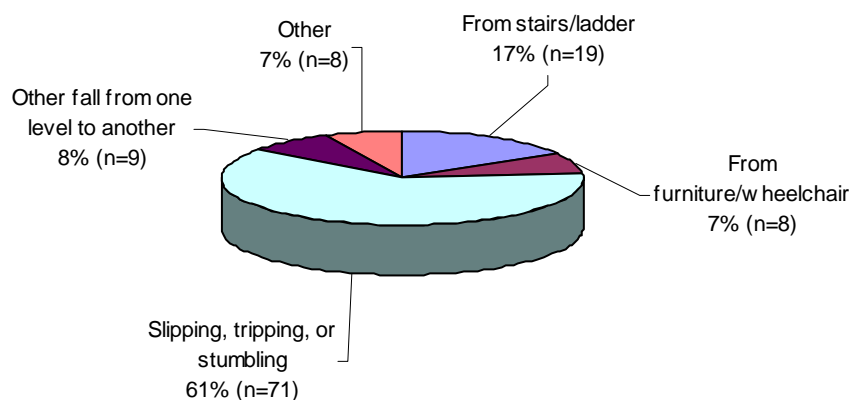
<b>Table 4. Causes of Unintentional Injury-Related Inpatient Hospitalizations among Gila County Residents, Arizona 2005</b>		
<b>Cause</b>	<b>Number</b>	<b>Percent</b>
Fall	166	50%
Other/unspecified	58	18%
Motor vehicle traffic	48	14%
Poisoning	21	6%
Other pedal cycle	17	5%
Overexertion	13	4%
Struck by/against	9	3%
<b>Total</b>	<b>332</b>	<b>100%</b>

## Falls

Males accounted for 34 percent of unintentional fall-related hospitalizations (n=56) and females accounted for 66 percent (n=110). Three percent of fall-related hospitalizations were among children 14 years and under (n=5); 2 percent were among individuals ages 15 to 24 years (n=3); 23 percent were among individuals ages 25 to 64 years (n=38); and 72 percent were among individuals 65 years and older (n=120).

For 31 percent of unintentional fall-related inpatient hospitalizations, information regarding contributing event was not specified in the hospital discharge database (n=51). Among the hospitalizations for which contributing event was specified, 61 percent were due to slipping, tripping, or stumbling (n=71). Figure 6 shows unintentional fall-related hospitalizations by contributing event.

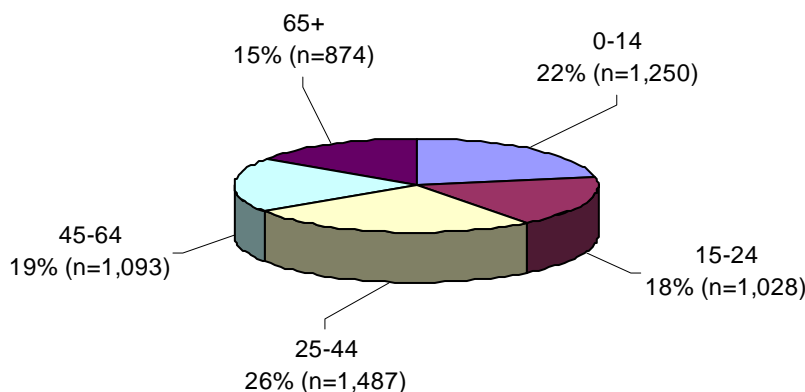
**Figure 6. Inpatient Hospitalizations due to Unintentional Falls by Contributing Event, Gila County, Arizona 2005 (n=115)**



## Non-Fatal Emergency Department Visits

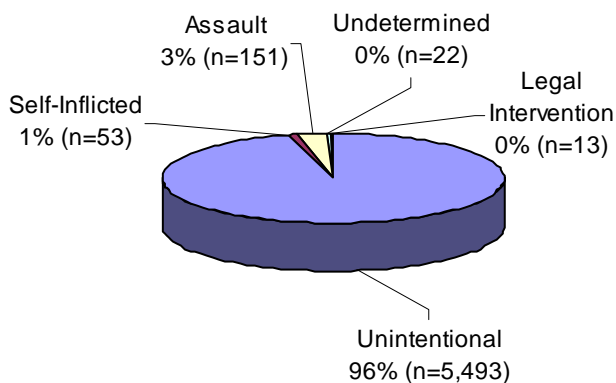
In 2005, there were 5,732 injury-related emergency department visits among residents of Gila County. Males accounted for 53 percent of these visits (n=3,038) and females accounted for 47 percent (n=2,693). One individual was of unknown sex. The largest percentage of visits was among individuals ages 25 to 44 years (26 percent, n=1,487). Figure 7 shows injury-related emergency department visits by age group.

**Figure 7. Injury-Related Emergency Department Visits by Age Group, Gila County, Arizona 2005 (n=5,732)**



Nearly all of the emergency department visits were due to unintentional injuries (96 percent, n=5,493); 3 percent were due to assaults (n=151); and 1 percent were due to self-inflicted injuries (n=53). Thirteen emergency department visits were due to legal intervention, and 22 injury-related visits were of undetermined intent. Figure 8 shows emergency department visits by intent.

**Figure 8. Injury-Related Emergency Department Visits by Intent, Gila County, Arizona 2005 (n=5,732)**



## *Gila County Injury-Related Emergency Department Visits Compared to Other Arizona Counties*

Table 5 shows the intent of injury-related emergency department visits for residents of Gila County compared to residents of the rest of Arizona. The leading intent of injury-related visits was unintentional for both Gila County and the remaining counties, accounting for the majority of injury-related visits. Overall, Gila County and the rest of Arizona had similar percentages of visits due to self-inflicted injuries and assaults.

<b>Table 5. Intent of Injury-Related Emergency Department Visits, Gila County Compared to Other Arizona Counties, 2005</b>			
Gila County (n=5,732)		Arizona, excluding Gila County (n=372,939)	
<u>Intent</u>	<u>Percent of Total</u>	<u>Intent</u>	<u>Percent of Total</u>
Unintentional	96	Unintentional	94
Self-Inflicted	1	Self-Inflicted	1
Assault	3	Assault	4
Undetermined	0	Undetermined	1

The most common cause of unintentional injury-related emergency department visits in Gila County was falls (28 percent, n=1,530). Table 6 shows the causes of unintentional injury-related emergency department visits for Gila County residents in 2005.

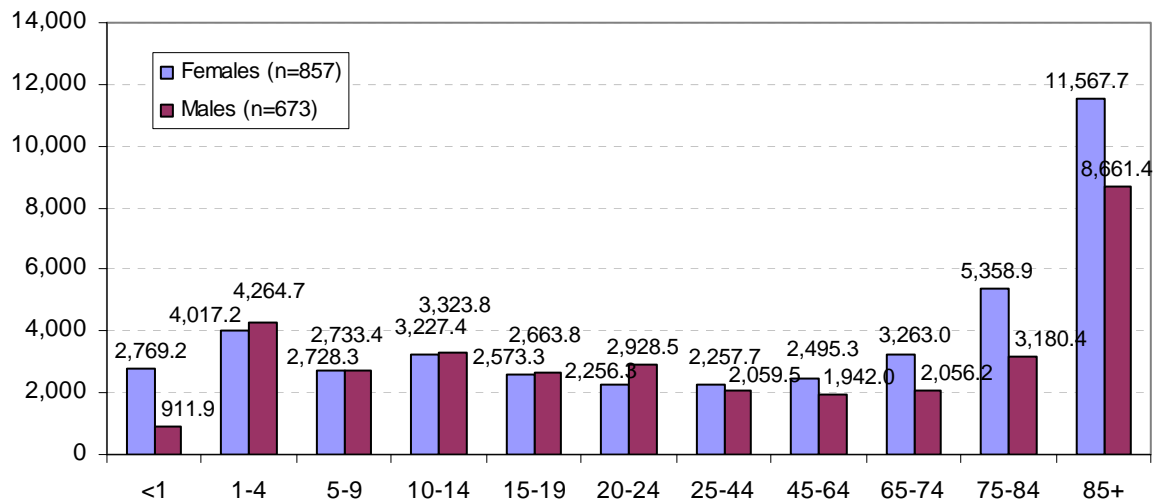
<b>Table 6. Causes of Unintentional Injury-Related Emergency Department Visits among Gila County Residents, Arizona 2005</b>		
<b>Cause</b>	<b>Number</b>	<b>Percent</b>
Fall	1,530	28%
Struck by/against	839	15%
Other/unspecified	820	15%
Overexertion	755	14%
Cut/pierce	521	9%
Motor vehicle traffic	389	7%
Nature/environment	325	6%
Motor vehicle non-traffic	114	2%
Other pedal cycle	112	2%
Fire/hot object	88	2%
<b>Total</b>	<b>5,493</b>	<b>100%</b>

### Falls

There were 1,530 emergency department visits due to unintentional falls. Males accounted for 44 percent of these visits (n=673) and females accounted for 56 percent (n=857). Individuals ages 25 to 64 years had the highest percentage of unintentional fall-related emergency department visits (38 percent, n=585). Twenty-four percent of visits were among children 14 years and under (n=364); 10 percent were among individuals ages 15 to 24 years (n=152); and 28 percent were among individuals 65 years and older (n=429).

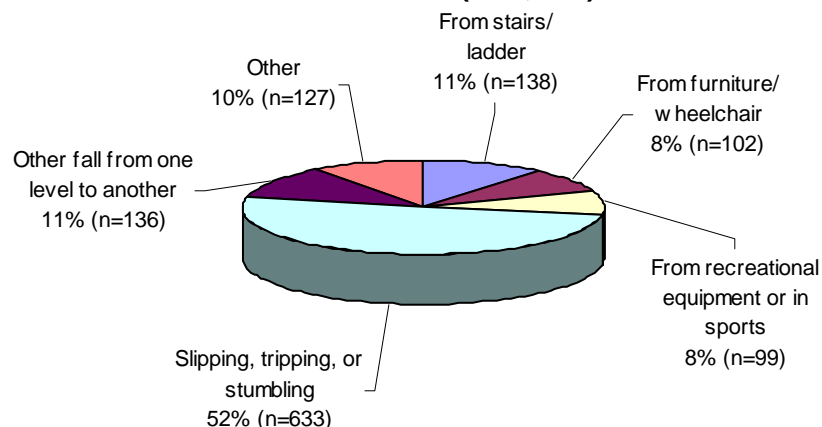
The highest rates of unintentional fall-related emergency department visits were among older adults. Females 85 years and older had a rate of 11,567.7 fall-related emergency department visits per 100,000 residents. Figure 9 shows emergency department visit rates of unintentional falls by age group and gender.

**Figure 9. Unintentional Fall-Related Emergency Department Visit Rates per 100,000, Gila County, Arizona 2005 (n=1,530)**



For 19 percent of the unintentional fall-related emergency department visits, information regarding contributing event was not specified in the emergency department database (n=295). Among the emergency department visits for which contributing event was specified, 52 percent of unintentional falls were due to slipping, tripping, or stumbling (n=633). Figure 10 shows emergency department visits due to unintentional falls by contributing event.

**Figure 10. Emergency Department Visits due to Unintentional Falls by Contributing Event, Gila County, Arizona 2005 (n=1,235)**



## Summary

In 2005, there were 72 injury-related deaths in Gila County, and the largest percentage of deaths was among individuals ages 25 to 44 years (36 percent, n=26). The majority of these deaths were due to unintentional injuries (63 percent, n=45). The most common cause of unintentional injury deaths was motor vehicle traffic crashes (44 percent, n=20). For residents of Gila County, unintentional injury is the leading cause of death for individuals ages 15 to 44 years.<sup>1</sup> Twenty-two percent of injury-related deaths in Gila County were suicides (n=16); 14 percent were homicides (n=10); and 1 percent were of undetermined intent (n=1).

There were 373 non-fatal inpatient hospitalizations due to injury among residents of Gila County. Forty-one percent of the hospitalizations were among individuals 65 years and older (n=151). Eighty-nine percent of the hospitalizations were due to unintentional injuries (n=332); 7 percent were due to self-inflicted injuries (n=25); 3 percent were assaults (n=13); and 1 percent were of undetermined intent (n=3). The most common cause of unintentional injury-related hospitalizations was falls (50 percent, n=166).

There were 5,732 injury-related non-fatal emergency department visits among residents of Gila County in 2005. The largest percentage of visits was among individuals ages 25 to 44 years (26 percent, n=1,487). Ninety-six percent of the emergency department visits were due to unintentional injuries (n=5,493); 3 percent were due to assaults (n=151); and 1 percent were due to self-inflicted injuries (n=53). The most common cause of unintentional injury-related emergency department visits was falls (28 percent, n=1,530).

Source for deaths: 2005 Death Certificate Database

Source for hospitalizations: 2005 Inpatient Hospital Discharge Database

Source for emergency department visits: 2005 Outpatient Emergency Department Database

## Arizona Counties with Population, 2005

